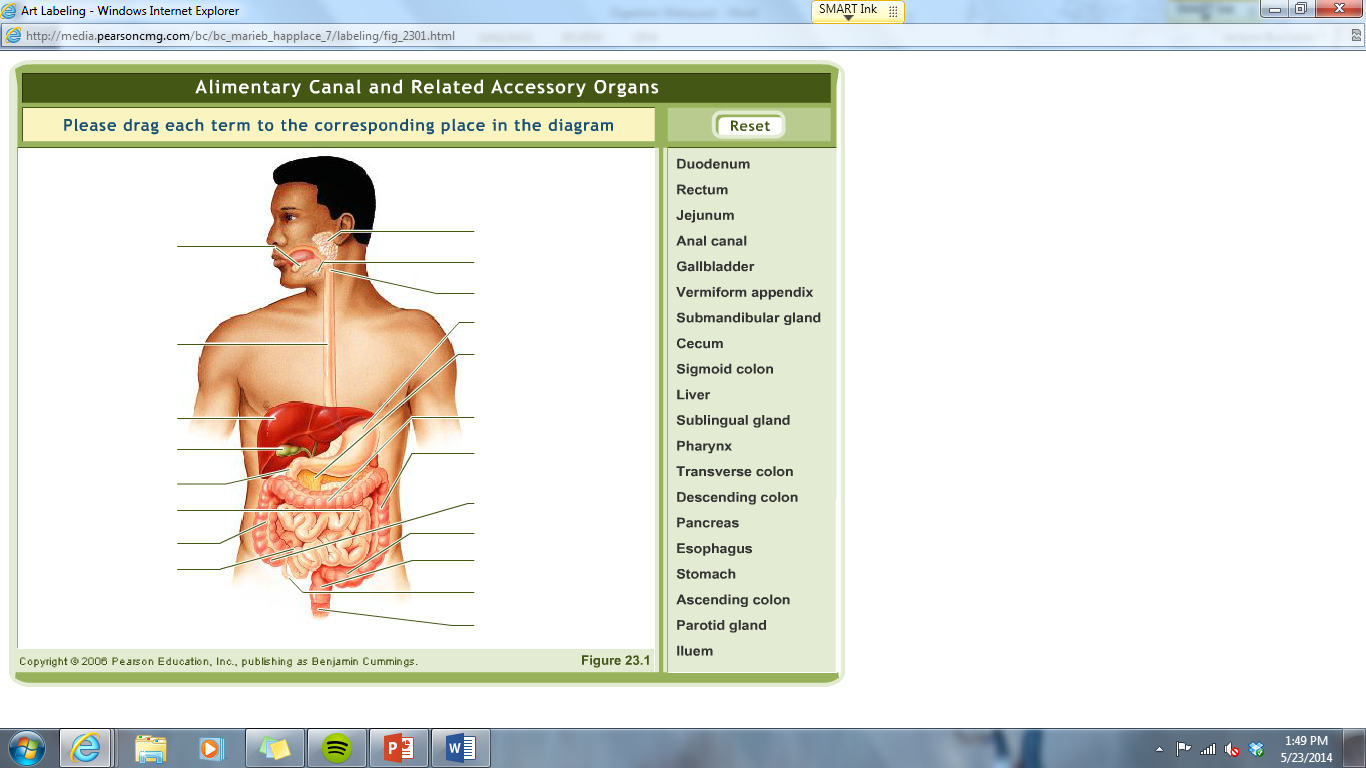
Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_

**Digestive System Webquest**

**Part I- Identifying Digestive Structures**

Use this website to help you label the following diagram.

<http://media.pearsoncmg.com/bc/bc_marieb_happlace_7/labeling/fig_2301.html>



**Part II- Getting to Know Your Digestive System.**

Watch the following animation and use it to help you answer the questions that follow.

<http://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter26/animation__organs_of_digestion.html>

1. The mechanical process of teeth breaking down food is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Chemical digestion begins in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ where your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ glands secrete \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. After swallowing, your body performs an involuntary movement called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which forces the food through the esophagus into the stomach.
4. The stomach has the ability to expand due to small folds called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. The stomach aids in digestion by secreting a strong acid called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. The bolus, mixed with stomach juices, is now called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. Once food exits the stomach through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_sphincter, it enters the first part of the small intestines called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. The chyme then flows through the rest of the small intestine, consisting of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. The liver and pancreas are considered to be secondary digestive structures. What roles do they play in digestion?
10. Anything that isn’t digested in the small intestine is passed into the large intestine where \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are absorbed and the remaining chyme becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
11. What is the role of the rectum?

**Part IV- Gastrointestinal Diseases**

A. The new fad of going “gluten-free” has swept the country. More and more people are going on gluten-free diets and more and more companies are coming out with gluten-free products. Read the following article to educate yourself about why people choose to be gluten-free and who is really effected by gluten! Answer the questions that follow.

<http://health.usnews.com/health-news/articles/2012/06/01/making-sense-of-the-gluten-free-food-frenzy>

1. What is gluten? Did you know that most people who are gluten free do not even know what gluten is? Just watch this clip from Jimmy Kimmel! <http://www.refinery29.com/2014/05/67578/jimmy-kimmel-gluten>
2. Who SHOULDN’T eat gluten, and why?
3. Most people who should not eat gluten suffer from a disease called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_disease. Only about \_\_\_\_% of the population actually suffers from this disease! However, about \_\_\_\_\_\_\_\_\_% of the population suffers from gluten sensitivity. So if you have gastrointestinal issues they suggest you try being gluten-free for about a week to see if it helps.
4. Why is gluten all of a sudden an issue? Why didn’t our grandparents deal with this way back when they were wee lads?
5. Why are many doctors against a gluten-free diet?

B. IBS (irritable bowel syndrome) was once thought to be a psychological disorder. Read this article to find out about the truth! <http://www.medicalnewstoday.com/releases/273833.php> and answer the questions.

1. What is IBS? What causes it?

2. How can nutrition effect this disease?

3. What can you do to improve symptoms?

C. Research 1 other gastrointestinal disease of your choice. Explain what it is, symptoms, what causes it, and how you can improve the symptoms.